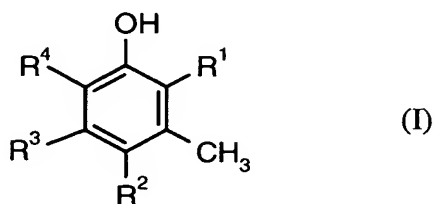


**What is claimed is:**

1. A process for hydrodehalogenating halogenated meta-cresols of the formula (I)



in which the  $R^1$  to  $R^4$  radicals are each independently hydrogen or halogen, but at least one of these radicals is halogen,

characterized in that halogenated meta-cresols of the formula (I) are contacted with a catalyst which has been prepared by applying one or more salts of palladium and/or platinum and optionally copper salts to an aluminum oxide or titanium oxide support material, together with hydrogen, at temperatures between 100 and 250°C.

2. The process as claimed in claim 1, characterized in that halogenated meta-cresols of the formula (I) in which at least two of the  $R^1$  to  $R^4$  radicals are each chlorine are used.
3. The process as claimed in at least one of claims 1 and 2, characterized in that it is performed at 150 to 250°C.
4. The process as claimed in at least one of claims 1 to 3, characterized in that from 0.5 to 50 mol of hydrogen are used per mole of halogen in the halogenated meta-cresol used.
5. The process as claimed in at least one of claims 1 to 4, characterized in that the hydrogen is used in a mixture with an inert gas.
6. The process as claimed in at least one of claims 1 to 5, characterized in that the catalyst has been prepared by applying  $PdCl_2$ ,  $PtCl_2$  and/or  $PtCl_4$  to an aluminum oxide or titanium dioxide support material.

7. The process as claimed in at least one of claims 1 to 6, characterized in that the catalyst has been prepared by applying  $\text{PdCl}_2$ ,  $\text{PtCl}_2$  and/or  $\text{PtCl}_4$  to an aluminum oxide or titanium dioxide support material and additionally applying  $\text{CuCl}$  or  $\text{CuCl}_2$ .
- 5 8. The process as claimed in at least one of claims 1 to 7, characterized in that the catalyst has been prepared by applying a total amount of from 0.5 to 100 g of one or more salts of palladium and/or platinum and optionally copper salts to one liter of aluminum oxide or titanium oxide support material.
9. The process as claimed in at least one of claims 1 to 8, characterized in that it is  
10 performed at pressures in the range from 1 to 5 bar and in the gas phase.
10. The process as claimed in at least one of claims 1 to 9, characterized in that the product mixture present after the hydrodehalogenation reaction is subsequently sent to a chlorination reaction.